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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/552,230	06/30/2006	Volker Fricke	GB920030029US1	6714

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EXAMINER	
RUBIN, BLAKE J	
ART UNIT	PAPER NUMBER
2457	
MAIL DATE	DELIVERY MODE
10/21/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/552,230	FRICKE ET AL.	
	Examiner	Art Unit	
	BLAKE RUBIN	2457	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *29 May 2008*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *13 and 17-20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *13 and 17-20* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. This action is a response to communications filed May 29, 2008.

2. Claims 13, and 17-20 are currently amended and are pending in this application. Claims 1-12, 14-16, and 21-36 have been canceled.

3. This application is a national stage entry of PCT/GB04/01384, filed April 1, 2004, which further claims foreign priority to United Kingdom Application No. 0308121.3, filed April 9, 2003.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 13, and 17-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Airy et al (U.S. Patent Application Publication No 2002/0142780, hereinafter Airy), in view of Payne et al (U.S. Patent No. 6,021,433, hereinafter Payne), Masseroni et al (U.S. Patent Application Publication No. 2003/0054850, hereinafter Masseroni), Batson (U.S. Application No. 5,844,327), Anderson II et al (U.S. Patent No. 5,909,544, hereinafter Anderson), and Chefalas et al (U.S. Application Publication No. 2002/0138786, hereinafter Chefalas).

6. With respect to claim 13, Airy discloses a data logging method (paragraph [0031], lines 1-5) that utilizes a schedule (paragraph [0031], lines 5-8) of data transfer periods (paragraph [0031], lines 5-8, *time slots*) during which data is transferred from a plurality of client devices (paragraph [0031], lines 1-5, *multiple subscriber units*) to a server (paragraph [0031], lines 1-5, *base transceiver station*) over a network (paragraph [0036], lines 1-2), said method comprising for a first device of the plurality of devices (paragraph [0038], lines 2-5, *a particular subscriber unit*):

obtaining, by the server, from the first device a communication of an actual data transfer size of data actually stored in the first device (paragraph [0043], lines 7-9);

estimating, by the server, a corresponding future data transfer size of the data actually stored in the first device (paragraph [0053], lines 1-3), said estimating being based on a historic data transfer size for data previously transferred from the first device to the server over the network (paragraph [0010], lines 20-22, *influences future schedules*; paragraph [0069], lines 4-7), said schedule currently being based on the historic data transfer size for the first device (paragraph [0010], lines 20-22, *influences future schedules*);

responsive to said determining that said difference exists (paragraph [0050], lines 3-8), changing an existing data transfer period for the first device in the schedule (paragraph [0057], lines 6-9, *influencing subsequent transmission scheduling*) in a way that minimizes change to the schedule (paragraph [0008], lines 4-8, *minimizing the management of the transmission scheduling*);

conditionally updating the schedule by the server (paragraph [0057], lines 1-3, *subsequently generated transmission schedules*), said conditionally updating comprising actually

updating the schedule if the server has determined that a difference exists between the actual data transfer size and the corresponding estimated future data transfer size (paragraph [0068], *updated to reflect the subscriber data queue included within the header of the most recently transmitted sub-protocol data unit*), said actually updating comprising changing an existing data transfer period for the first device in the schedule to a new data transfer period that is consistent with the actual data transfer size (paragraph [0068], *updated to reflect the subscriber data queue included within the header of the most recently transmitted sub-protocol data unit*); and

receiving, by the server, a transmission over the network from the first device of the data actually stored in the first device (paragraph [0070]), said transmission being received in accordance with the schedule (paragraph [0070]) resulting from said changing the existing data transfer period for the first device (paragraph [0050], lines 3-8; paragraph [0057], lines 6-9, *influencing subsequent transmission scheduling*);

receiving, by the server, information relating to reception power over time by a another device of the plurality of devices (paragraph [0013]; paragraph [0098]; paragraph [0103], lines 4-6) and estimating, by the server based on the received information relating to the power, times unsuitable for the another device to be connected to the server (paragraph [0096]; paragraph [0103]);

said server forecasting a bandwidth of the network (paragraph [0104], lines 2-5) by monitoring current download activity from data transfers between the network and said server (paragraph [0104], lines 5-12)

But does not disclose keeping track of off-line devices, GSM radio reception power, data transfer at 80% of the forecasted bandwidth, running out or memory, or determining when to upload software.

However, Payne discloses keeping track, by the server, of an off-line device of the plurality of devices that is off- line (column 11, line 56-60, *information basis*) and informing the off-line device of the off-line device's schedule for transferring data from the off-line device to the server as soon as the off-line device becomes on-line (column 11, line 56-60, *immediately*);

It would have been obvious to one skilled in the art at the time the invention was made to combine the teachings of Airy with the teachings of Payne. The motivation to combine being, to increase the efficiency of the method by disseminating the schedule to all devices regardless of their online status.

And Masseroni discloses information relating to GSM radio reception power over time by a another device of the plurality of devices (paragraph [0010], lines 1-8).

It would have been obvious to one skilled in the art at the time the invention was made to combine the teachings of Airy with the teachings of Masseroni. The motivation to combine being, to increase the versatility of the method to include the GSM radio standard, which is an extension of the TDMA system of Airy.

And Batson discloses revising the schedule to achieve data transfer from the plurality of devices to the server at 80% of the forecasted bandwidth (column 7, lines 56-59);

It would have been obvious to one skilled in the art at the time the invention was made to combine the teachings of Airy with the teachings of Batson. The motivation to combine being,

to increase the efficiency of the method operating by operating below maximum capacity, thereby allowing the scheduler flexibility to update itself based on the network conditions.

And Anderson discloses changing, by the server, the schedule in response to detecting that a device of the plurality of devices has run out of memory (column 4, lines 22-30);

It would have been obvious to one skilled in the art at the time the invention was made to combine the teachings of Airy with the teachings of Anderson. The motivation to combine being, to increase the robustness of the method by prohibiting the network to transfer data to a device that will be unable to accept any data transfers.

And Chefalas discloses determining, by the server, when to upload new software from the server to the plurality of devices (paragraph [0034], lines 7-12), taking into account a reduction in an effective communications bandwidth, said reduction resulting from the data transferred from the plurality of devices to the server (paragraph [0034], lines 32-40).

It would have been obvious to one skilled in the art at the time the invention was made to combine the teachings of Airy with the teachings of Chefalas. The motivation to combine being, to increase the efficiency of the method by up-loading software during periods when there is available bandwidth.

7. With respect to claim 17, the combination of Airy, Payne, Masseroni, Batson, and Chefalas discloses the method of claim 13, Airy further discloses wherein said actually updating does not change an order of the devices in the schedule (paragraph [0068], *updated to reflect the subscriber data queue included within the header of the most recently transmitted sub-protocol data unit*).

8. With respect to claim 19, the combination of Airy, Payne, Masseroni, Batson, and Chefalas discloses the method of claim 13, Airy further discloses wherein if the actual data transfer size for the first device exceeds the corresponding future estimated data transfer size for the first device (paragraph [0050], lines 3-8) and said actually updating comprises having the new data transfer period for the first device begin at an earlier time in the schedule (paragraph [0050], lines 3-8, *additional data blocks can be conveyed to the base transceiver station without having to transmit additional RTS signals).*

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

10. Claims 18 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Airy, Payne, Masseroni, Batson, and Chefalas (hereinafter Airy et al), as applied to claim 13 above, in further view of Eshet et al (U.S. Patent No. 6,674,804, hereinafter Eshet).

11. With respect to claim 18, the combination of Airy et al discloses the method of claim 13, wherein if the actual data transfer size exceeds the corresponding estimated future data transfer

size (paragraph [0050], lines 3-8), but does not disclose replacing transfer periods with transfer periods that that are less than the duration of the new data transfer period.

12. However, Eshet discloses actually updating comprises replacing the existing data transfer period of the first device in the schedule (column 7, lines 64-67; column 8, lines 1-3) with a data transfer period of a second device of the plurality of devices (column 8, lines 3-7, *updating index i*), and wherein a duration of the data transfer period of the second device in the schedule is less than a duration of the new data transfer period of the first device (column 7, lines 62-67, where the i^{th} instance is incremented after the it is determined that the transfer period will be filled by the "second device").

13. It would have been obvious to one skilled in the art at the time the invention was made to combine the teachings of Airy et al with the teachings of Eshet. The motivation to combine being, to increase the efficiency of data transfers by allocating slots in a queue to data segments that effectively fit into the predetermined size of each queue slot.

14. With respect to claim 20, the combination of Airy et al discloses the method of claim 13, but does not disclose filling the free time slot when the data transfer size is less than estimated.

15. However, Eshet discloses if the actual data transfer size for the first device is less than the corresponding estimated transfer size for the first device so as to create a free time slot in the schedule (column 8, line 57) and said actually updating comprises filling the free time slot with a data transfer period of a second device of the plurality of devices (column 9, lines 20-26).

16. It would have been obvious to one skilled in the art at the time the invention was made to combine the teachings of Airy et al with the teachings of Eshet. The motivation to combine

being, to increase the efficiency of data transfers by adding additional data segments into a predetermined queue slot, whenever there is additional space in the slot.

Conclusion

17. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

18. Any inquiry concerning this communication or earlier communications from the examiner should be directed to BLAKE RUBIN whose telephone number is (571) 270-3802. The examiner can normally be reached on M-R: 8:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ario Etienne can be reached on (571) 272-4001. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

10/16/08

/Rubin Blake/
Examiner, Art Unit 2457

/ARIO ETIENNE/
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